

STATEMENT OF OWNERSHIP

The present application, U.S. Patent Application No. 10/658,520, and U.S. Patent No. 6,780,114 B2, U.S. Patent No. 6,497,515 and U.S. Patent No. 6,773,165 B2 as well as U.S. Patent Application No. 2002/0051597 A1 were, at the time the invention to the present application (10/658,520) was made, owned by NTN Corporation.

REMARKS

Claims 3 and 5 have been amended. 1, 3-5 and 7-9 remains pending in the present application. Basis for the amendments can be found throughout the specification, drawings and claims as originally filed.

OBJECTION TO THE SPECIFICATION

Applicants have amended Claims 3 and 5 in an attempt to overcome the Examiner's objection to the specification. Accordingly, Applicants believe the claims to be proper and respectfully request withdrawal of the rejection.

REJECTION UNDER 35 U.S.C. 103(a)

The Examiner has rejected Claims 1 and 9 under 35 U.S.C. §103(a) as being unpatentable over Sera et al. (U.S. Patent Application No. 2002/0051597). The Examiner alleges that this reference discloses Applicants' invention.

Claim 1, among other elements, claims a connection portion of the wheel hub and outer joint member as a plastic deformed connection mechanism having an axially pull out per force more than 160 kN.

The Sera et al. reference relied on by the Examiner fails to disclose or suggest such a feature. The Examiner alleges that such an axial pull out force would be an optimum value as a result of effective variable involving routinely skilled in the art. Clearly, this is not the case.

The Sera et al. reference in Fig. 7a and 7B illustrates a splined inner and outer member which includes a projecting cylindrical portion 74 which is crimped toward the outer end surface 83 of the hub ring. The crimp portion 75 is plastically deformed by the

crimping punch M. Thus, the wheel hub and outer member are mutually fixed by controlling the crimping punch M. This generates a load in the axial direction.

The present invention has the wheel hub and outer joint member fixed together by radially outwardly expanding the fitting portion of the outer joint member. This generates a no load force in the axial direction. Accordingly, the pre-set on the bearing is not adversely affected by the load to the wheel hub in the outer joint member as in the Sera et al. reference. Also, since Sera et al. includes crimping in the axial direction, it would not be concerned with a pull out force as in the present application. Accordingly, Applicants believe Claim 1 and 9 to be patentably distinct over the art cited by the Examiner.

The Examiner has rejected Claims 1, 3-5, and 7-9 under 35 U.S.C. §103(a) as being obvious U.S. Patent Nos. 6,497,515; 6,773,165; and 6,780,114. These references, as well as the Sera et al. application, are prior art only under 35 U.S.C. §102(e). Accordingly, 35 U.S.C. §103(c) is applicable. As stated above, the present application (U.S. Serial No. 10/658,520) and U.S. Patent Nos. 6,497,515; 6,773,165; and 6,780,114 as well as U.S. Patent Application No. 2002/0051597 were, at the time of the invention of the present application (U.S. Serial No. 10/658,520) owned by NTN Corporation, the assignee of all patents and applications. Thus, U.S. Patent Nos. 6,497,515; 6,773,165; and 6,780,114 and U.S. Serial No. 10/658,520 shall not preclude patentability under §103. Thus, Applicants respectfully request the Examiner to withdraw his §103(a) rejection.

DOUBLE PATENTING REJECTION

The Examiner objects to Claims 4 and 5 as being duplicates of one another. Applicants respectfully request the Examiner to further review since the language in Claims 4 and 5 is different and not the same. Also, the Examiner has rejected Claims 1, 3-5, and 7-9 under the judicially-created doctrine of obviousness-double patenting in view of Claims 1-16 of commonly owned U.S. Patent No. 6,773,165. Also, the Examiner has rejected the claims under judicially-created obviousness-type double patenting as being unpatentable over Claims 1-24 of U.S. Patent No. 6,497,515.

Applicants enclose a terminal disclaimer overcoming the double patent rejection. Accordingly, Applicants respectfully request withdrawal of this rejection.

In light of the above amendments and remarks, Applicants submit that all pending claims are in condition for allowance. Accordingly, Applicants respectfully request the Examiner to pass the case to issue at his earliest possible convenience. Should the Examiner have any questions regarding the present application, he should not hesitate to contact the undersigned at (248) 641-1600.

Respectfully submitted,

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